

Application No. 10/626,053  
6203.214-US

Page 5 of 8  
February 12, 2007

---

### REMARKS

Applications respectfully request reconsideration and withdrawal of the rejections and objections set forth in the Office Action of August 11, 2006, in view of the foregoing amendments and following remarks.

#### *Timing of Submission*

The period for responding to the Office Action ended on February 11, 2007, which is a Sunday. Accordingly, Applicants' submission of this Response on February 12, 2007 is timely under 35 USC § 21(b).

#### *The Claim Amendments and Pending Claims*

Applicants hereby amend independent claims 19 and 42 by, *i.e.*, removal of MAS analogues and additive elements from the scope of the claims. Applicants have eliminated the "additive" element to remove non-elected subject matter from the scope of the pending claims (rejoinder of such subject matter is believed to not be available, but Applicants would welcome the Office's views on this point). As such, Applicants reserve the right to pursue a divisional application with respect to such subject matter.

Applicants have removed the "analogue" element from the scope of these claims to expedite allowance of claims relating to the use of MAS compounds, an aspect of Applicants' invention that is potentially of interest to current potential licensing activities. For similar reasons, Applicants hereby cancel claim 26. Applicants also cancel claims 28-41, which were directed to use of "additives" and, thus, considered withdrawn from consideration without likely opportunity for rejoinder. Again, assuming this is correct, Applicants reserve the right to pursue such claims in a divisional application. Applicants have made a stylistic amendment in claims 19, 42 and 43 (using the "American" spelling for fertilization) and have added the chemical names for the MAS compounds FF-MAS and T-MAS to claim 23 (support for this amendment can be found at, e.g., paragraph 0005 of the published version of the application (US Patent Publication No. 20050175976)). The amendments add no new matter and do not modify the subject matter of the claims in a manner that would require any further

Application No. 10/626,053  
6203.214-US

Page 6 of 8  
February 12, 2007

---

search by the Examiner. As such, Applicants respectfully submit that entry and consideration of the amended claims is appropriate.

Claim 25 is currently considered withdrawn, but remains pending, as rejoinder of this claim may be appropriate. Thus, claims 19, 21, 23-24, 27, 42, and 43 are pending and currently at issue. Of these claims, only claims 19 and 43 are independent claims.

*The Amended Specification is in Proper Form*

Applicants have amended the specification to add a cross-reference to related patent applications, setting forth priority/continuity information for this patent application.

*Information Disclosure Statement*

Applicants thank the Examiner for stating her position regarding the listing of references in the specification. Applicants will submit an Information Disclosure Statement with any of these references that are not currently of record for the Examiner's consideration.

*The Amended Claims are Sufficiently Definite*

Applicants' amendment to the claims provides a definition for each abbreviation used therein (see, e.g., amended claim 23 with respect to "FF-MAS" and "T-MAS"). As noted above, the present claim amendments remove MAS analogues from the scope of the claims (although Applicants reserve the right to pursue claims directed to MAS analogues in a continuation or divisional application). Claim 19 defines "MII" as meaning metaphase II (see paragraph 0008 of the published application). As such, the present claim amendments obviate the indefiniteness rejections set forth in the Office Action.

*The Claims are Novel*

The Office Action rejected claims 19, 21, 23, 24, 27-29, 42, and 43 under 35 USC § 102(b) as allegedly anticipated by US Patent 5,716,777 or WO 96/00235 in

Application No. 10/626,053  
6203.214-US

Page 7 of 8  
February 12, 2007

---

light of Smitz et al., *Human Reproduction*, 14 (Suppl. 1), 145-161 (1999).

Applicants note that the '777 patent and '235 PCT application are equivalent patent counterparts (cognates) of one another and accordingly only the '777 patent is discussed herein. Applicants respectfully submit that these rejections are in error and should be withdrawn.

Specifically, the process described in the '777 patent (which, being co-owned, is well known to the patentee) relates to resumption of meiosis in oocytes from the prophase of the first meiotic division (meiosis I) by use of MAS. Although the '777 patent uses phrase "*in vitro* fertilization" to generally describe this process, it is clear from the description that the method is focused on this particular aspect of oocyte culture/maturation (see, e.g., col. 3, lines 18-22). In contrast, the present claims are directed to Applicants subsequent discovery that, surprisingly, MAS compounds are *also* able to promote the implantation of oocytes that receive exposure to MAS *after metaphase of the second meiotic division has been reached*. The '777 patent simply does not teach or in any way suggest the subject matter of the independent claims. Nor does a combination of the Smitz reference and '777 patent teach or suggest the claimed invention. Simply put, the Smitz reference does not deal with use of MAS compounds. While the Office Action cites Smitz as evidencing that 80% of oocytes are metaphase II, this number is merely referring to oocytes after treatment with GnRH agonist compounds (page 150), and sheds no light on whether MAS compounds would be beneficial in respect of formation of zygotes or pre-embryos from metaphase II oocytes.

*The Claimed Invention is Nonobvious*

The Office Action further rejected claims 19, 21, 23, 24, 27-29, 42, and 43 under 35 USC § 103 as allegedly encompassing subject matter that would have been obvious to one of ordinary skill in the art in view of the '777 patent, Smitz reference, Barnes et al., *Human Reproduction* 10(12):3243-3247 (1995), and US Patent 5,693,534. The Barnes reference and '534 patent are cited to show what is known in the field of *in vitro* fertilization, and, in the case of the Barnes reference, to specifically demonstrate that

Application No. 10/626,053  
6203.214-US

Page 8 of 8  
February 12, 2007

---

Immature oocytes are cultured in medium, exposed to spermatozoa, and allowed to form zygotes. Even assuming that this is a correct characterization of these references, Applicants respectfully submit that such a combination of all of the cited art would not have suggested to one of ordinary skill in the art the claimed invention. Neither the Barnes reference nor the '534 patent relate to the use of MAS compounds. As such, citation of these additional references does not change the fact that neither the '777 patent nor the Smitz reference teach or suggest the claimed invention. Accordingly, Applicants respectfully request the Office to withdraw these Section 103 rejections and provide an indication that the claims are free of the cited art.

*Conclusion*

In view of the above, it is respectfully submitted that the application is now in condition for allowance and issue. Early action to that end is respectfully requested. The Commissioner is hereby authorized to charge any fees in connection with this application and to credit any overpayments to Deposit Account No. 14-1447. The Examiner is invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

Date: February 12, 2007

**/Len S. Smith/**  
Len S. Smith, Reg. No. 43,139  
Customer No. 23,650  
609-919-7760